



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Food Industry Machinery							
Course Code		KGT144		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		<p>The aim of the course is</p> <ul style="list-style-type: none">• to teach food machineries• to equip students with the knowledge and skills of food pereservation• to develop the ability of the students to heat treatment• to give students the opportunity to microwave applications• to enable students develop freezing systems							
Course Content		<p>food equipments protection methods pasteurizer, sterilizer, avaporator, dehidrator transport systems</p>							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)		Lec. Hüseyin Nail AKGÜL							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Ayık M., 1985. Ürün İşleme Tekniği ve Makinaları. Ankara Üniversitesi Yayınları. Ankara.
2	Saldamlı İ., Saldamlı E.,2004. Gıda Endüstri Makineleri. Savaş Kitap ve Yayınevi. Ankara.

Week	Weekly Detailed Course Contents	
1	Theoretical	The basic operations in the food industry. Overview of Housing methods
2	Theoretical	Weighing and measuring instruments in the food industry. Transportation and transmission schemes
3	Theoretical	Transportation and transmission schemes, mechanical, pneumatic, hydraulic conveyors.
4	Theoretical	Preliminary operations. Wash, stem extraction separation, peeling, core extraction, production machinery input.
5	Theoretical	Principles of classification, sieve systems, filtration, filtration systems are developed. Principles of centrifugal separation and separators.
6	Theoretical	Mixing and karışımılama machines. Homogenization (full and partial). homogenizers
7	Theoretical	Thermal processing machinery and equipment. Simple heating systems
8	Intermediate Exam	Midterm Exam
9	Theoretical	Discrete and continuous heat-transfer schemes. Pipes and plate heat exchangers.
10	Theoretical	Evaporation and evaporators. Single, multiple, pipe, plate, forced, mixture, etc. The types and working principles of the evaporator
11	Theoretical	Deaeratörler, deodorizatörler.
12	Theoretical	Condenser. microwave heaters
13	Theoretical	The drying process and the concept of dehydration
14	Theoretical	Indirect, direct, freeze and microwave dryers
15	Theoretical	Shredders Size reduction machines. Cutting machines, presses (discrete-continuous)
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Reading	10	1	0	10



Individual Work	14	0	1	14
Midterm Examination	1	2	2	4
Final Examination	1	4	1	5
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To have the knowledge and skills of equipments and machines
2	have knowladge about heat exchangers.
3	Effectively be able to understand the packaging and equipment
4	To have the knowledge and skills of equipments and machines
5	Effectively be able to understand the equipment

Programme Outcomes (Food Technology)

1	To be able to remember technolgies used in food sector
2	to be able to recognise food production condition and provide to food safety
3	to be able to comprehend basic processes in food production
4	to be able to apply hygien and sanitation rules in food facilities
5	to be able to remember basic chemistry, food chemistry and microbiology
6	to be able to write physicial, chemical and nutritional properties of foods and to comment their effect on human health
7	to be able to memorise food quality control technics and to evaluate result of control according to food legislation
8	to be able to have knowledge of proffessional ethics and responsibility
9	to be able to work in team and individual
10	to be able to communicate orally and profiency in writing
11	to be able to follow professional development that adopt of life-long learning
12	to be able to be a person who wanted for sector

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3
P1	5	5	5
P2	5	5	5
P3	5	5	5
P4	4	4	4
P5	4	4	4
P6	4	4	4
P7	4	4	4
P8	4	4	4
P9	5	5	5
P10	5	5	4
P11	5	5	5
P12	5	5	5

